



# Land Processes DAAC (LP DAAC) User Working Group August 13-14, 2008



- UWG Introduction (Kevin Gallo)
  - DAAC UWG refresher/quiz





### DAAC UWG refresher (why we are here)

"The U.S. Geological Survey's Center for Earth Resources Observation and Science (EROS) has been designated as the site for the Land Processes Distributed Active Archive Center (LP DAAC)...."

http://lpdaac.usgs.gov/landdaac/presentations/uwg\_09-07/UWG\_Charter9\_22\_2007.pdf





### **DAAC UWG refresher (role of LP DAAC?)**

"The LP DAAC ingests, processes, distributes, documents, and archives data from land-related sensors and provides the science support, user assistance, and outreach required to foster the understanding and use of these data within the land remote sensing community.





### DAAC UWG refresher (Role of UWG?)

"The Earth Sciences Data and Information System (ESDIS) Project ... has directed each DAAC to establish and sponsor a DAAC User Working Group (UWG) ..

UWG is responsible for providing consultation and recommendations covering a broad range of topics related to the LP DAAC systems, services, and capabilities.





### DAAC UWG refresher (Role of UWG?)

"...is responsible for representing the interests of the land remote sensing community in this process. The LP DAAC UWG will not be responsible for making decisions or implementing recommendations."

UWG provides recommendations, LP DAAC management makes final decisions.





Topics for consideration by the UWG include, but are not limited to:

• Prioritization and pursuit of new data holdings





Topics for consideration by the UWG include, but are not limited to:

- Prioritization and pursuit of new data holdings
- Mechanisms to enhance user access to data, including user interface attributes and modes of data distribution





Topics for consideration by the UWG include, but are not limited to:

- Prioritization and pursuit of new data holdings
- Mechanisms to enhance user access to data, including user interface attributes and modes of data distribution
- Levels of support provided by the LP DAAC to the user community





Topics for consideration by the UWG include, but are not limited to:

- Prioritization and pursuit of new data holdings
- Mechanisms to enhance user access to data, including user interface attributes and modes of data distribution
- Levels of support provided by the LP DAAC to the user community
- Research and development in support of product prototyping and generation





Topics for consideration by the UWG include, but are not limited to:

- Prioritization and pursuit of new data holdings
- Mechanisms to enhance user access to data, including user interface attributes and modes of data distribution
- Levels of support provided by the LP DAAC to the user community
- Research and development in support of product prototyping and generation
- Science requirements and capabilities





### **DAAC UWG refresher (Summary)**

The UWG will be provided presentations related to mission of LP DAAC including DAAC activities related to ingest, processing, support, access/distribution, and archival of data.

DAAC solicits our consultation and recommendation on these activities and other DAAC related issues.







#### Your National Weather Service forecast

#### 3 Miles NNE Sioux Falls SD



En Español

Sunday

Enter Your "City, ST" or zip code

Go

NWS Sioux Falls, SD

Point Forecast: 3 Miles NNE Sioux Falls SD

Last Update: 7:06 am CDT Aug 13, 2008 Forecast Valid: 8am CDT Aug 13, 2008-6pm CDT Aug 19, 2008

#### 43.6N -96.73W (Elev. 1433 ft) Forecast at a Glance

Today	Tonight	Thursday	Thursday Night	Friday	Friday Night	Saturday	Saturday Night
			1	1			
50%	30%	40%	50%	20%	20%	20%	Slight Chc
Severe	Chance	Chance	Chance	Slight Chc	Slight Chc	Slight Chc	
Tstms	Tstms	Tstms	Tstms	Tstms	Tstms	Tstms	Tstms
Hi 85°F	Lo 58°F	Hi 82°F	Lo 59°F	Hi 79°F	Lo 57°F	Hi 81°F	Lo 58°F

#### **Detailed 7-day Forecast**

Hazardous weather condition(s):

#### Hazardous Weather Outlook

Today: Scattered showers and thunderstorms, mainly after 3pm. Some of the storms could be severe. Mostly cloudy. with a high near 85. Calm wind becoming southwest between 5 and 10 mph. Chance of precipitation is 50%.

Tonight: Scattered showers and thunderstorms before 10pm. Partly cloudy, with a low around 58. Northeast wind around 5 mph becoming calm. Chance of precipitation is 30%.

Thursday: A 40 percent chance of showers and thunderstorms after 1pm. Mostly cloudy, with a high near 82. Calm wind becoming east between 5 and 10 mph.

Thursday Night: A 50 percent chance of showers and thunderstorms. Mostly cloudy, with a low around 59. East wind between 5 and 10 mph.

Friday: A 20 percent chance of showers and thunderstorms. Mostly cloudy, with a high near 79. East wind between 5 and 10 mph.

#### **Current Conditions**

[Move Down]

Mostly Sunny Hi 82°F

Sioux Falls, Foss Field Lat: 43.59 Lon: -96.74 Elev: 1434 Last Update on Aug 13, 6:56 am CDT

Partly Cloudy	
60°E	

(16°C)

Humidity:	93 %
Wind Speed:	Calm
Barometer:	29.87" (1010.7 mb)
Dewpoint:	58°F (14°C)
Visibility:	10.00 mi.
More Local Wx:	3 Day History:

#### Radar and Satellite Images



**Datailed Point Forecast** 

[Move Unl

Done





### **UWG** Logistics

- Breaks (restrooms, smoking areas, cell phones, etc)
- Lunch
- Wireless access
- Group dinner reservation
- Directions, Things to Do...





# NASA's Core and Community Data System Elements

- The core comprises all the hardware, software, physical infrastructure, and intellectual capital NASA recognizes as necessary for meeting its requirements for Earth science data system management. Core data system elements reflect NASA's responsibility for managing Earth science satellite mission data characterized by the continuity of research, ready access to and usability of data.
- The community elements are those tools or capabilities developed and deployed largely outside NASA's core elements and are characterized by their 'evolvability' and leading-edge innovation.





### Agenda Topics – Day 1

- USGS / EROS
- NASA / ESDIS
- Core Data System Data Archive
- Core Data System Data Access
- User Scenarios
- UWG Input (Data Access)





### Agenda Topics – Day 2

- Core Data System Mission Support
- UWG Input (Mission Support)
- Community Data / Tools
- Summarize Actions / Recommendations





### **2007 Recommendations**

- Pursue new data holdings... (community)
- Expand collaborative opportunities... (community)
- Increase awareness... (mission)
- Consider member exchange program...
- Facilitate meetings between USGS and NASA re: LTA
- Provide links... (mission)
- Expand visibility of alternative data access... (mission)
- Expand visibility of product documentation... (mission)
- MRTWeb beta... (access)
- Glovis scene lists... (access)
- Develop a link exchange... (mission)
- Improve representation of data pool use... (archive / access)
- Focus on tier 1 users... (access)





### Introductions

- Name, Affiliation
- LP DAAC Data Usage and Access Methods
- Favorite Summer Olympic Event
- Expectation for Meeting





### Backup...





### **Ground Rules...**

- Feel free to ask questions during the presentations...
- If substantial discussion occurs during a presentation, we may table a topic for later discussion in the interest of time
- Positive feedback is welcome ... as is constructive criticism





# NASA's Core and Community Data System Elements

- The core comprises all the hardware, software, physical infrastructure, and intellectual capital NASA recognizes as necessary for meeting its requirements for Earth science data system management. Core data system elements reflect NASA's responsibility for managing Earth science satellite mission data characterized by the continuity of research, ready access to and usability of data.
- The community elements are those tools or capabilities developed and deployed largely outside NASA's core elements and are characterized by their 'evolvability' and leading-edge innovation.





### **Architecture Goals**

- Customer Data Access Driven
  - Fast, powerful, spatial / simple
  - Access to Data Services ie. Subset, mosaic, reproject, reformat
- Reliable
  - As an archive center, data stewardship holds significant value
- Scaleable
  - Tradition of large orders and mass distribution of data
  - Allow for inclusion of multiple data sets
- Simple
  - Integrate evolved ESDIS Core System (ECS)
  - Publish metadata to ECHO
  - Physical reduction in footprint
- Interoperable
  - Interoperable with ECHO, GDS, MODAPS, others...





### LP DAAC Stakeholders

- NASA Earth Science Division, Headquarters
  - Martha Maiden, HQ
  - Woody Turner, LP DAAC Project Scientist
- NASA ESDIS Project
  - Jeanne Behnke, Science Operations Office (SOO) Manager
  - Dawn Lowe, Science Systems Development Office Manager
  - Andy Mitchell, ECHO Manager
  - Beth Weinstein, EMS Manager
- EOSDIS Data Center Alliance (EDCA)
- LP DAAC User Working Group (UWG)





### LP DAAC Stakeholders cont.

- Science Teams
  - MODIS Science Team
  - ASTER Science Team
- Data Providers
  - MODAPS (MODIS)
  - GDS (ASTER)
- Collaborators
  - Land Validation Team
  - Volcano Hazards
  - EROS Projects (EBAS, LTA, LDCM...)





### **Near-term LP DAAC Objectives**

- Completion of MODIS V5 Reprocessing Campaign
- Completion of ECS Evolution Activities (7.20, 7.21)
- Operational Efficiencies / Automation
- ECS Data Gateway (EDG) to ECHO/WIST transition
- Landsat metadata in ECHO
- Enhanced Distribution Services ("MRTWeb")
- Increased Data Pool Capacity ("online archive")
- Distribution of ASTER Global DEM
- Planning toward Long-Term Archive





### **Non-LP DAAC activities**

- eMODIS
- TerraLook enhancements / outreach
- Web-enabled data distribution for NASA MEASURES "Enhanced Vegetation Index and Phenology ESDR"
- NASA GIO OGC WMS/WCS prototyping







